Approved For Release 2002/01/25 : CIA-RDP00-01458R000100130005-3

1 April 1980

MEMORANDUM FOR: Director of Medical Services

STATINTL FROM : [redacted]
Chief, Psychological Services Staff
Office of Medical Services

SUBJECT : Reliability of PATB Tests as Reported in Our Response to the IG Report on PATB

1. Attached is a copy of Table 1, which appeared in our response to the IG report on PATB, and a revised version of this table which differs from the original in two important respects. First, an eighth test, viz., Numerical Operations, is added to the list of tests examined. Second, the sample sizes, with one exception, are larger. The number of white males is increased from 116 to 122, black males from 119 to 168, and black females from 79 to 103. For some reason, five of the 112 white females in the original sample did not take the Numerical Operations test. Hence, the number of white females is decreased from 112 in the original sample to 107 in the revised sample so that, as in the original sample, all subjects in the revised sample completed all tests. The net result of these changes in sample size is to increase (a) the total sample from 426 to 500, (b) the number of males from 235 to 290, (c) the number of females from 191 to 210, (d) the number of whites from 228 to 229, and (e) the number of blacks from 198 to 271. As a result of the larger sample sizes, the reliability estimates are more precise.

2. For the overall sample of 500 applicants, and for the 290 males and the 210 females as well, all eight reliabilities exceed .85, and four of the eight exceed .90. For both the 229 whites and the 271 blacks, all eight reliabilities exceed .80, and three of the eight exceed .90 as well. All eight reliabilities exceed .80 for the white-male, white-female, black-male, and black-female samples, and three of the eight reliabilities also exceed .90 for each of these samples.

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3. In summary, the reliabilities are overall slightly higher for the larger, revised sample than for the smaller, original sample. Furthermore, the revised sample contains data on one additional PATB test. These impressive results provide further evidence for the general reliability of PATB.

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TABLE 1

Spearman-Brown Reliabilities of Seven PATB Tests

PATB Tests	426 Applicants	235 Males	191 Females	228 Whites	198 Blacks	116 White Males	112 White Females	119 Black Males	79 Black Females
Vocabulary Mastery	.942	.940	.946	.924	.921	.930	.919	.922	.921
Reading Comprehension	.879	.865	.896	.824	.813	.839	.801	.776	.870
Abstract Reasoning	.871	.874	.861	.846	.829	.852	.823	.825	.818
Arithmetic Problems	.906	.915	.886	.884	.829	.904	.838	.818	.796
Foreign Language Aptitude	.964	.953	.971	.966	.896	.960	.965	.889	.906
Knowledge of World Events	.889	.882	.880	.860	.862	.877	.813	.840	.826
Interpretation of Data	.875	.890	.852	.836	.814	.869	.788	.820	.792

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Spearman-Brown Reliabilities of Eight PATB Tests

PATB Tests	500 Applicants	290 Males	210 Females	229 Whites	271 Blacks	122 White Males	107 White Females	168 Black Males	103 Black Females
Vocabulary Mastery	.945	.943	.949	.924	.928	.931	.918	.927	.931
Reading Comprehension	.887	.874	.903	.815	.833	.818	.801	.807	.878
Abstract Reasoning	.872	.876	.863	.843	.827	.841	.832	.829	.815
Arithmetic Problems	.901	.909	.883	.872	.810	.880	.838	.803	.804
Foreign Language Aptitude	.964	.955	.970	.965	.908	.963	.962	.901	.915
Knowledge of World Events	.887	.882	.881	.848	.861	.857	.811	.851	.837
Interpretation of Data	.884	.895	.864	.857	.821	.883	.814	.825	.813
Numerical Operations	.993	.994	.993	.994	.988	.994	.995	.990	.986

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STATINTL FROM : [redacted]
Chief, Psychological Services Staff
Office of Medical Services

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